

REMARKS

Specification

The Examiner states that the title of the invention is not descriptive, and that a new title is required that is clearly indicative of the invention to which the claims are directed. Applicants believe the title to be adequately descriptive with respect to the claimed invention, and consistent with conventional patent practice. The Examiner further has not suggested any alternative title believed to be more appropriate. As provided in MPEP 606.01, if the Examiner continues to believe that the title is not adequately descriptive, the Examiner may, at the time of allowance, change the title by Examiner's amendment.

Claim Rejections - 35 USC § 102

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Riedel (U-S. Patent 6,150,124). The Examiner states that Riedel discloses (see Fig. 4 and col. 5, lines 30-45) a circuit for detecting light comprising: a light-integrating photosensor circuit (18) having one or more thin-film photosensors and being responsive to a variable integration period signal and to ambient light for producing a photo signal representing the intensity of the ambient light, wherein the photo signal may be in one of at least three states including a no-signal state (low ambient light), an in-range state and a saturated state (high ambient light); and a control circuit (microprocessor, not shown) for receiving the photo signal and automatically increasing the period of integration period signal when the photo signal is in the no-signal state and decreasing the period of the integration period signal when the photo signal is in the saturated state so as to result in the photo signal being in the in-range state and producing a corresponding ambient light signal. This rejection is respectfully traversed.

Contrary to the Examiner's assertion, there does not appear to be any teaching in Riedel with respect to an integrating photosensor circuit. Rather, Reidel suggests periodic sampling and integration of the output of a photodetector by a separate microprocessor, with an observation that the integration time of an output signal may be changed. There is no disclosure with respect to automatically changing the period of an integration signal to an

integrating photosensor circuit in response to no-signal, in-range, and saturated signal states. Riedel accordingly clearly does not anticipate the present invention, and reconsideration of this rejection is respectfully requested.

Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Bechtel et al. (U.S. Patent 6,402,328). The Examiner states that Bechtel et al. disclose (see Fig. 3 and col. 8, lines 41-67) a circuit for detecting light comprising: a light-integrating photosensor circuit having one or more thin-film photosensors (48; see Fig. 2) and being responsive to a variable integration period signal and to ambient light for producing a photo signal representing the intensity of the ambient light, wherein the photo signal may be in one of at least three states including a no-signal state (low ambient light), an in-range state and a saturated state (high ambient light); and a control circuit (not shown) for receiving the photo signal and automatically increasing the period of integration period signal when the photo signal is in the no-signal state and decreasing the period of the integration period signal when the photo signal is in the saturated state so as to result in the photo signal being in the in-range state and producing a corresponding ambient light signal. This rejection is respectfully traversed.

Bechtel et al does appear to disclose an integrating photosensor circuit. There is no disclosure in Bechtel et al, however with respect to a automatic feedback type circuit for automatically increasing the period of the integration period signal of the integrating circuit when the photo signal is in a no-signal state and decreasing the period of the integration period signal when the photo signal is in a saturated state so as to result in the photo signal being in the in-range state. Bechtel et al rather apparently teaches to employ a test control signal including a variety of pre-selected integration times (see, e.g., col. 8, lines 55+, control signal 70 with varying integration periods 76, 82, 88), and to simply ignore resulting signal pulses less than or greater than preset signal pulse durations. While possibly adequate for the specific application disclosed therein (automatic dimming of mirrors in vehicles), such solution is not easily integrated into a TFT circuit, and does not enable as large as a dynamic range as the presently claimed system. Bechtel et al accordingly does not anticipate the present invention, and reconsideration of this rejection is respectfully requested.

Claim Rejections - 35 USC 103

Claims 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riedel. Regarding claims 3-6, the Examiner states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide one of the claimed photosensors in the apparatus of Riedel to conveniently and cost effectively obtain ambient light detection. Regarding claims 7-10, the Examiner states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide either analog or digital signals in the apparatus of Riedel (for digital) to obtain a signal that is more resilient to noise or more compatible with modern digital processors, or (for analog) obtain a more cost effective and less complex device. Regarding claim 11, the Examiner states it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide another photosensor circuit in the apparatus of Riedel to obtain additional detection for redundancy or error-checking purposes. This rejection is respectfully traversed.

As explained above, there does not appear to be any teaching in Riedel with respect to an integrating photosensor circuit, nor with respect to automatically changing the period of an integration signal to an integrating photosensor circuit in response to no-signal, in-range, and saturated signal states. Thus, even if substitution of further features as proposed by the Examiner were to be made in Riedel for the purposes proposed by the Examiner, the present invention still would not be obtained and a prima facie case of obviousness accordingly has not been established. Reconsideration of this rejection is accordingly respectfully requested.

Claims 3, 5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bechtel et al. Regarding claims 3 and 5, the Examiner states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide one of the claimed photosensors in the apparatus of Bechtel et al. to conveniently and cost effectively obtain ambient light detection. Regarding claims 7-10, the Examiner states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide either analog or digital signals in the apparatus of Bechtel et al.

(for digital) to obtain a signal that is more resilient to noise or more compatible with modern digital processors, or (for analog) obtain a more cost effective and less complex device. Regarding claim 11, the Examiner states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide another photosensor circuit in the apparatus of Bechtel et al. to obtain ambient light detection at different locations for improved light control. This rejection is respectfully traversed.

As explained above, there is no disclosure in Bechtel et al with respect to an automatic feedback type circuit for automatically increasing the period of the integration period signal of the integrating circuit when the photo signal is in a no-signal state and decreasing the period of the integration period signal when the photo signal is in a saturated state so as to result in the photo signal being in the in-range state. Thus, even if substitution of further features as proposed by the Examiner were to be made in Bechtel for the purposes proposed by the Examiner, the present invention still would not be obtained and a prima facie case of obviousness accordingly has not been established. Reconsideration of this rejection is accordingly respectfully requested.

Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese publication of Toshiba (JP 2002-297096) in view of Bechtel et al. Regarding claims 12-16 and 18, the Examiner states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a variable integration period ambient light detector in the apparatus of Toshiba in view of Bechtel et al. to improve detection by increasing the dynamic range of the detector as taught. Regarding claim 17, the Examiner states that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide another photosensor circuit in the apparatus of Toshiba in view of Bechtel et al. to obtain ambient light detection at different locations for improved display control. This rejection is respectfully traversed.

As explained above, there is no disclosure in Bechtel et al with respect to an automatic feedback type circuit for automatically increasing the period of the integration period signal of the integrating circuit when the photo signal is in a no-signal state and decreasing the period of the integration period

signal when the photo signal is in a saturated state so as to result in the photo signal being in the in-range state. Thus, even if the light detector system of Bechtel were to be provided in the apparatus of Toshiba as proposed by the Examiner, the present invention display of claim 12 and method of controlling a display of claim 18 still would not be obtained, and a prima facie case of obviousness accordingly has not been established. Reconsideration of this rejection is accordingly respectfully requested.

In view of the foregoing remarks, reconsideration of this patent application is respectfully requested. A prompt and favorable action by the Examiner is earnestly solicited. Should the Examiner believe any remaining issues may be resolved via a telephone interview, the Examiner is encouraged to contact Applicants' representative at the number below to discuss such issues.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.